

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Cancelled)
2. (Currently Amended) A liquid crystal display (LCD) comprising a liquid crystal (LC) cell formed by two plane parallel substrates at least one of which is transparent to incident light, a liquid crystal medium which is present between the two substrates, and at least one optical retardation film, ~~characterized in that wherein~~ at least one of said optical retardation films is positioned inside the switchable liquid crystal cell of said LCD, and between the two substrates of the LC cell, said LCD further comprising a color filter array provided on one of said substrates, wherein said at least one optical retardation film is positioned between the color filter and the LC medium.
3. (Cancelled)
4. (Currently Amended) An LCD comprising
  - 1) a liquid crystal (LC) cell comprising the following elements, starting from the edges to the centre of the cell in the sequence listed below
    - a) a first and a second substrate plane (11a, 11b) parallel to each other, at least one of which is transparent to incident light,
    - b) optionally an array of nonlinear elements (12) on one of said substrates which can be used to individually switch individual pixels of said LC cell, ~~preferably active elements like transistors, very preferably TFTs,~~
    - c) ~~optionally~~ a colour filter array (13) provided on one of said substrates, ~~preferably on the substrate opposite to that carrying the array of nonlinear elements~~, said colour filter optionally being covered by a ~~planarisation~~ planarization layer (14),
    - d) a first electrode layer (15a or 15b) provided on the inside of said first substrate,
    - e) optionally a second electrode layer (15a or 15b) provided on the inside of

said second substrate,

- f) optionally first and second alignment layers (16a or 16b) provided on said first and second electrodes,
- g) an LC medium (17) that is switchable between at least two different states by application of an electric field,

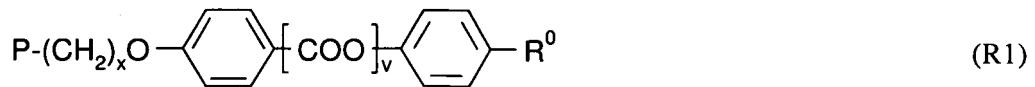
- 2) a first linear ~~polariser~~polarizer on one side of the LC cell,
- 3) optionally a second linear ~~polariser~~polarizer on the side of the LC cell opposite to that of the first linear ~~polariser~~polarizer,
- 4) at least one optical retardation film (18),

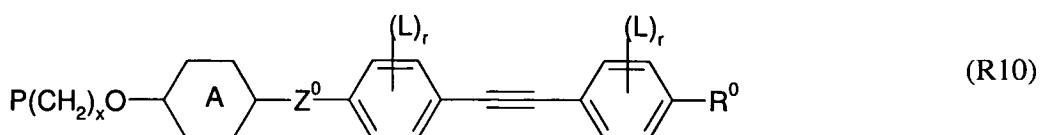
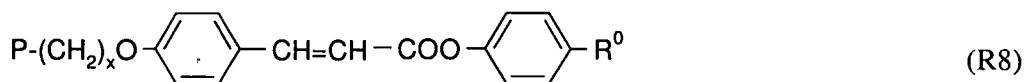
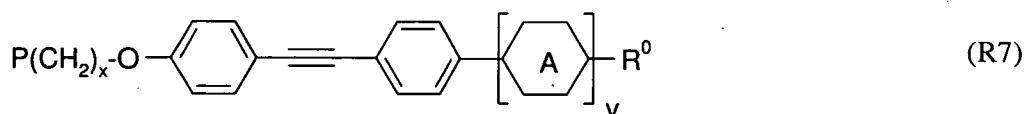
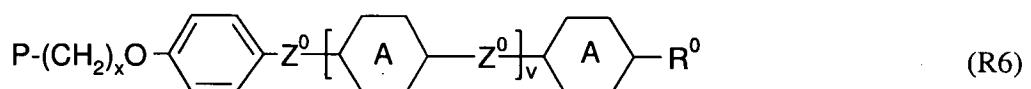
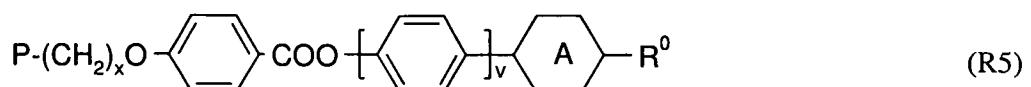
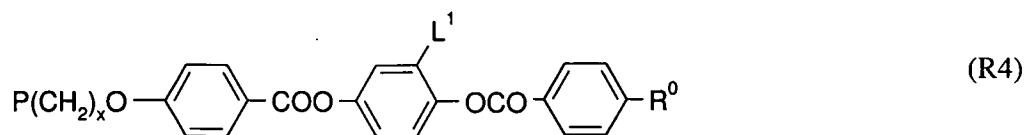
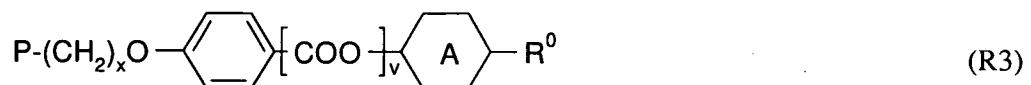
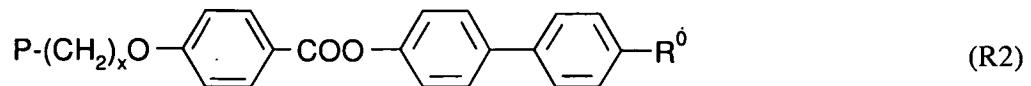
~~characterized in that~~wherein at least one of said optical retardation films is positioned between the first and second substrate (11a, 11b) of the LC cell, between the color filter and the LC medium.

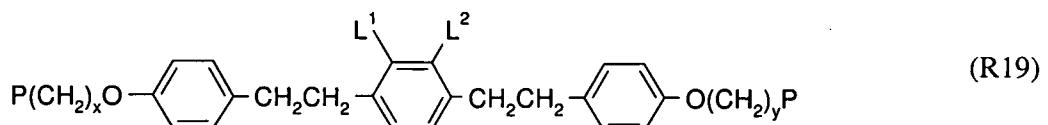
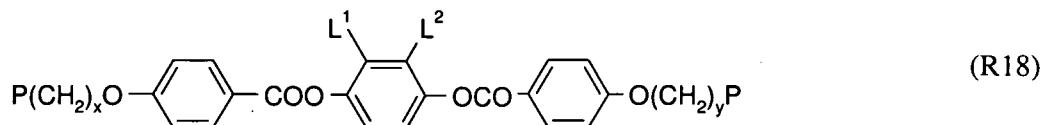
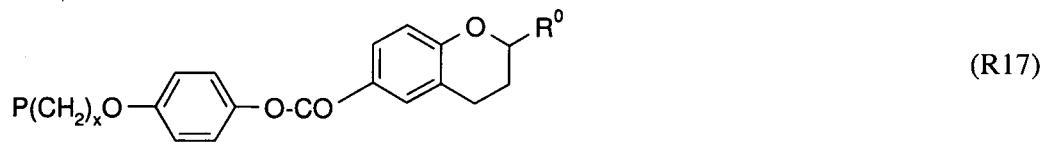
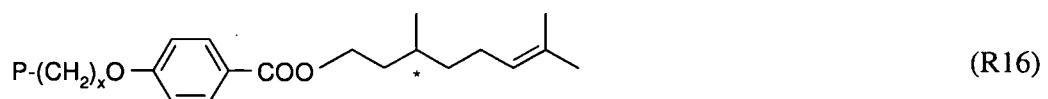
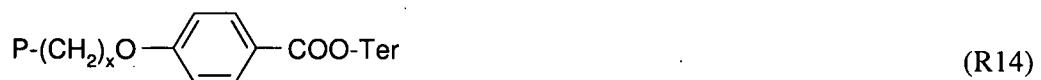
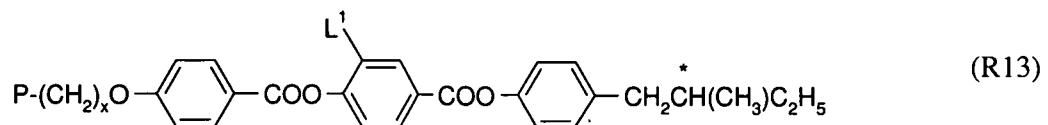
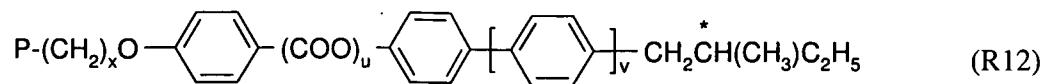
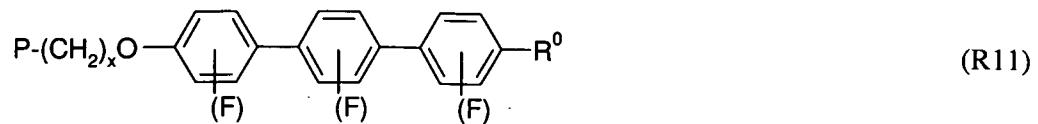
5. (Currently Amended) An LCD according to claim 4, ~~characterized in that it comprises~~comprising a colour filter array (13) being covered by a ~~planarisation~~planarization layer (14), and said at least one optical retardation film (18) is positioned on the side of the ~~planarisation~~planarization layer facing away from the colour filter array (13).
6. (Currently Amended) An LCD according to claim 4, ~~characterized in that it comprises~~comprising a colour filter array (13), and said at least one optical retardation film (18) is positioned on the side of the colour filter array facing away from the nearest substrate and is optionally covered by a ~~planarisation~~planarization layer (14).
7. (Currently Amended) An LCD according to claim 5, ~~characterized in that~~wherein the optical retardation film (18) is directly prepared on the colour filter array (13) or on the ~~planarisation~~planarization layer (14).
8. (Currently Amended) An ~~optical retardation film~~optical retardation film or LCD according to Claim 4, ~~characterized in that~~wherein the optical retardation film comprises ~~polymerised~~

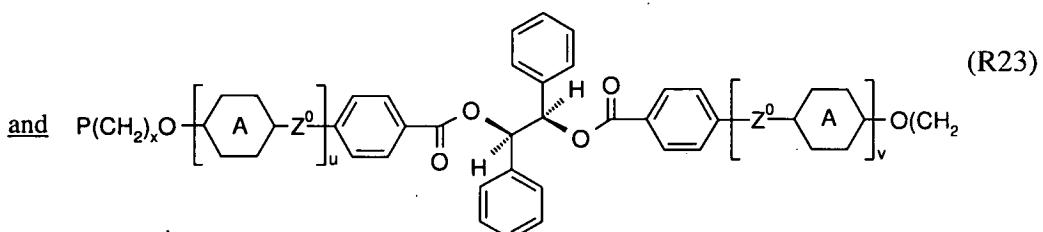
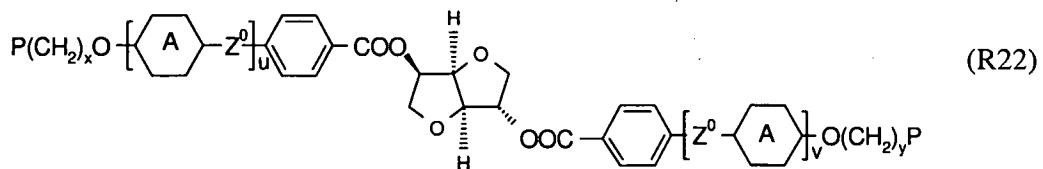
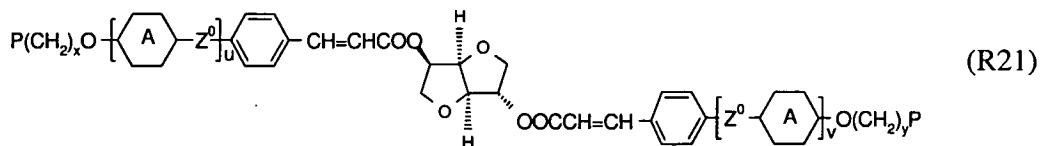
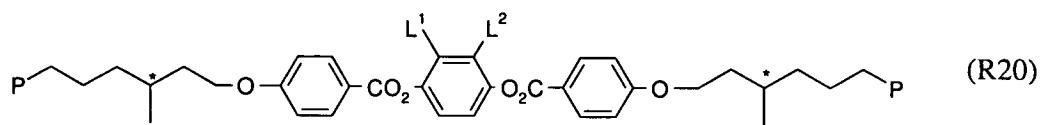
polymerized or crosslinked LC material.

9. (Currently Amended) An ~~optical retardation film or~~ LCD according to claim 8, characterized in thatwherein the optical retardation film is prepared from a polymerisable polymerizable LC material comprising one or more polymerisable polymerizable mesogenic or LC monomers.
10. (Currently Amended) An ~~optical retardation film or~~ LCD according to claim 9, characterized in thatwherein the polymerisable polymerizable LC material comprises
  - 5 - 70 % by weight of one or more direactive achiral mesogenic compounds,
  - 30 - 95 % ~~preferably 50 - 75 % by weight~~ of one or more monoreactive achiral mesogenic compounds,
  - 0 to 10 % by weight of one or more photoinitiators.
11. (Currently Amended) An ~~optical retardation film or~~ LCD according to claim 9, characterized in thatwherein LC material comprises at least one chiral compound selected from non-polymerisable polymerizable chiral compounds, polymerisable polymerizable chiral non-mesogenic compounds andor polymerisable polymerizable chiral mesogenic compounds.
12. (Currently Amended) An ~~optical retardation film or~~ LCD according to Claim 9, characterized in thatwherein the LC material comprises at least one compound selected from photoisomerisable photoisomerizable compounds andor phototunable echiral compounds.
13. (Currently Amended) An ~~optical retardation film or~~ LCD according to Claim 9, characterized in thatwherein the LC material comprises one or more compounds selected from the following formulae









wherein

P is a ~~polymerisable~~ polymerizable group,

x and y are identical or different integers from 1 to 12 ,

A is 1,4-phenylene that is optionally mono-, di- or trisubstituted by L<sup>1</sup>, or 1,4-cyclohexylene,

u and v are independently of each other 0 or 1,

$Z^0$  is  $-COO-$ ,  $-OCO-$ ,  $-CH_2CH_2-$ ,  $-CH=CH-$ ,  $-C\equiv C-$  or a single bond,

$R^0$  is a polar group selected from which is F, Cl, CN, NO<sub>2</sub>, OH, OCH<sub>3</sub>, OCN, SCN, an optionally fluorinated alkylcarbonyl, alkoxy carbonyl, alkylcarbonyloxy or alkoxy carbonyloxy group with up to 4 C atoms or a mono- oligo- or polyfluorinated alkyl or alkoxy group with 1 to 4 C atoms, or is an unpolar non-polar group selected from which is optionally halogenated alkyl, alkoxy, alkylcarbonyl, alkoxy carbonyl, alkylcarbonyloxy or alkoxy carbonyloxy group with 1 or more C atoms which is not one of the polar groups above,

Ter is a terpenoid radical,

Chol is a cholesteryl group,

L, L<sup>1</sup> and L<sup>2</sup> are independently of each other H, F, Cl, CN or an optionally halogenated alkyl, alkoxy, alkylcarbonyl, alkylcarbonyloxy, alkoxy carbonyl or alkoxy carbonyloxy group with 1 to 7 C atoms, and r is 0, 1, 2, 3 or 4

ans and wherein the phenyl rings are optionally substituted by 1, 2, 3 or 4 groups L.

14. (Currently Amended) An optical retardation film or LCD according to Claim 42, characterized in that wherein the optical retardation film is a planar, homeotropic, tilted, splayed, twisted or cholesteric film.
15. (Currently Amended) An optical retardation film or LCD according to Claim 42, characterized in that wherein the optical retardation film has a twisted or cholesteric structure with a pitch of less than 250 nm.
16. (Currently Amended) An optical retardation film or LCD according to Claim 42, characterized in that wherein the optical retardation film is a positive or negative A, O or C plate.
17. (Currently Amended) An optical retardation film or LCD according to Claim 42, characterized in that wherein the optical retardation film is a quarter wave

retardation film.

18. (Currently Amended) An ~~optical retardation film or~~ LCD according to Claim 12, ~~characterized in that~~wherein the optical retardation film is an optically biaxial film.
19. (Currently Amended) An ~~optical retardation film or~~ LCD according to Claim 12, ~~characterized in that~~wherein the optical retardation film is a biaxial film having a cholesteric structure which has optically biaxial negative C symmetry with  $n_x \neq n_y \neq n_z$  and  $n_x, n_y > n_z$ , wherein  $n_x$  and  $n_y$  are the principal refractive indices in orthogonal directions in the film plane and  $n_z$  is the principal refractive index perpendicular to the film plane.
20. (Currently Amended) An ~~optical retardation film or~~ LCD according to Claim 12, ~~characterized in that~~wherein the optical retardation film has a pattern comprising at least two regions having different orientation and/or different retardation.
21. (Currently Amended) An LCD according to Claim 2, ~~characterized in that~~which it is a display of the TN, HTN, STN, AMD-TN, IPS, DAP, VA, ECB, CSH, VAN, VAC, MVA, PVA, OCB, R-OCB, HAN, pi-cell, SSCT, isotropic or new mode.